A conference on
site-specific
crop and soil management
and computer
communication systems
for agriculture

July 30 - August 1, 1996
Krannert Center for the Performing Arts
University of Illinois
Urbana, Illinois
**CyberFarm**

The CyberFarm Exhibit is located in the Studio Theatre. It will feature five different perspectives in live demonstrations of the local community agricultural Internet network (CCNet) where farmers, input suppliers, consultants, grain merchants, Extension offices and others are linked together to share information and provide other services. The CyberFarm and CyberFarm Diner website are linked from the Information Agriculture Conference Home Page.

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**CyberFarm Diner**

The local diner has long been the place farmers meet to chat and exchange information in rural communities. Now that same opportunity to visit with others on common interests is available via the Internet. The CyberFarm Diner demo will be on the 2nd floor of the Lewis Center throughout the Conference. Participants are encouraged to come by and “surf the net” as an introduction to this opportunity for expanded horizons.

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**Tours**

Conference participants are invited to tour the newly updated Illini FS, Inc. chemical and fertilizer handling facility at Leverett, IL. The state-of-the-art operation features anhydrous ammonia, liquid and bulk blending capability, along with Variable Rate Technology (VRT) and GPS equipment. Machinery used for dry and liquid VRT application and GPS equipped ATVs used for soil testing will also be on display. Tour times scheduled:

- Wednesday, July 31
  - 7:30 to 9:30 am
  - 10 am to 12 noon
  - 1 pm to 3 pm

- Thursday, August 1
  - 7:30 to 9:30 am
  - 10 am to 12 noon

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**Name Badges/Registration**

Only those wearing conference name badges will be admitted to conference sessions. Exhibit workers may attend conference sessions if they are officially registered (registration fees paid). Exhibitors not officially registered are designated by the gray name badges at all times while at the conference functions. If you have questions, call (217) 244-4619.

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**Exhibits**

Exhibits are located in the main lobby area of the Krannert Center, including booths in the Great Hall lobby and the Colwell Playhouse lobby areas as well as in the Orchestra Rehearsal Room. The exhibit areas will be open according to the following schedule:

- Tuesday, July 30—9:00am-9:00pm
- Wednesday, July 31—8:00am-9:00pm
- Thursday, August 1—8:00am-3:00pm

Equipment also on display outside.

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**Lunch**

Sponsored lunches are provided for conference participants July 30, July 31 and August 1. A different color ticket is required each day. Tickets are in registration packets. Lunches will be served at the Illini Union.

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**Vendor Session**

If you are looking for in-depth exposure to a specific company's products or services and an opportunity to interact directly with a key representative of that company, the vendor sessions are for you. These sessions will be conducted completely by the specific product or service provider.

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**Precision A to Z**

The precision A to Z series is actually a 12-hour precision agriculture shortcourse within the Conference. It will be taught by highly qualified individuals from the public and private sector. The target audience includes farmers, dealers and others who would like an overview of the fundamentals of precision ag and its implementation. The A to Z program will be held in the Foellinger Great Hall. Please note that these sessions are offered only once.
Welcome to the 1996 Information Agriculture Conference. Additional program details and/or revisions will be announced during the Conference.

Monday, July 29

1:00-4:00pm  Conference Registration
1:00-8:00pm  Exhibit Setup

Vendor Session
3:00-7:00pm  Tryon Festival Theatre
  * AGRIS Corporation
  (Advance reservation required)

Tuesday, July 30

7:00am-5:30pm  Conference Registration
9:00am-9:00pm  Exhibits Open
9:30-11:45am  Opening General Session—Foellinger Great Hall
  Welcome
  David W. Dibb, PPI
  Don Holt, University of Illinois
  Introduction to the Information Agriculture Conference
  Harold F. Reetz, PPI
  New Developments in the Internet and Possibilities for Agriculture
  Larry Smarr, NCSA
  How Will It Play on the Farm? How Should We "Work" this Conference?
  Doug Harford, Illinois Farmer
11:45am-1:00pm  Lunch and Exhibits — Lunch sponsored by: AGRIS Corporation
1:00-3:00pm  Concurrent Sessions

**Precision A to Z**

Foellinger Great Hall
- Getting Ready for Precision: Records, People, Attitude  
  *Bob Beck, Conex/Land O' Lakes*
- Field Positioning  
  *Dave Tyler, Ashtech*

**Session 1**

Tryon Festival Theatre — Repeated at 3:30pm
- Variable Rate Nitrogen: What’s the Potential?  
  *Tom Bruisnera, PPI*
- Impact of Field Variability on Optimum Fertilizer Rates  
  *Gary Kachanoski, University of Guelph*
- Profitability of Variable Rate Nitrogen on Corn  
  *Gary Malzer, University of Minnesota*
- Tools for Site-Specific Management  
  *Dale Cowan, Agri-Food Laboratories*

**Session 2**

Colwell Playhouse Theatre — Repeated at 3:30pm
- Agriculture on the WWW: Future of the CyberFarm  
  *John Schmitz, University of Illinois*
- Use of the Internet in a Fertilizer Business  
  *John Fuller, J & H Burn Ltd.*
- Effective Use of the Internet  
  *Alaina Kanfer, NCSA*
- National Workplace Initiative  
  *Jerry Sheehan, NCSA*

**Session 3**

2-418 Opera Rehearsal Room — Repeated at 3:30pm
- Sampling and Sensing in the Northern Great Plains  
  *Dave Franz, North Dakota State University*
- Predicting Crop Productivity Using Electromagnetic Induction  
  *Newell Kitchen, University of Missouri*  
  *Ken Sudworth, USDA-ARS*
- Digital Aerial Photos in Precision Agriculture  
  *Kevin Spry, Datron/Transco, Inc.*
- Soil Sensor Update  
  *Mark Morgan, Purdue University*

**Session 4**

2-127 Drama Rehearsal Room — Repeated at 3:30pm
- Introduction to Differential GPS for Precision Agriculture Applications  
  *Sid Siefken, Trimble Navigation*
- Precision Farming with GPS  
  *Norman R. Cantin, NorthStar Technologies*
- GPS Guided Remote Control Tractor  
  *James Lee Adams, Georgia Farmer*
- Crop Disease Forecasting Using Weather Station Networks  
  *Michael Cahn, University of California Extension Service*
1:00-3:00pm  Cyber Dealership Workshop  
Levis Center - 2nd Floor  
- Farm Chemicals Magazine  
  Precision Progress — Dave Downey, Purdue University  
  Building a Breakeven Precision Business — Cheryl Kohls, Cenex/Land O’Lakes  
  Getting Paid in the Precision Business — Perry Petersen, Terra Industries  

Vendor Session  
Levis Center - 3rd Floor  
- ESRI Workshop  

3:00-3:30pm  Break  

3:30-5:30pm  Concurrent Sessions  

Precision A to Z  
Foellinger Great Hall  
- Sampling and Testing for Variable Rate Fertilization  
  Nyle Wollenhaupt, Soil Teq, Inc.  
- Equipment and Controllers for Precision Agriculture  
  Dean Fairchild, Cargill, Inc.  

Repeat Session  
1, 2, 3, 4  
See Tuesday, July 30, 1:00-3:00pm for Repeat Sessions 1, 2, 3 and 4.  
Locations and speakers are the same as listed on previous page.  

Cyber Dealership Workshop  
Levis Center - 2nd Floor  
- Farm Chemicals Magazine  
  Precision Progress — Dave Downey, Purdue University  
  Building a Breakeven Precision Business — Cheryl Kohls, Cenex/Land O’Lakes  
  Getting Paid in the Precision Business — Fred Fisher, Collingwood Grain, Inc.  

Vendor Session  
Levis Center - 3rd Floor  
- Use of SGIS, Falcon, and New Programs  
  John Mann, Soil Teq/Ag-Chem Equipment Co., Inc.  

Jam Session  
8:00-10:00pm  Tryon Festival Theatre  
Precision Agriculture: (Topics determined by individual speakers)  
  Tim Taylor, New York Farmer  
  Max Favourite, Indiana Farmer  
  Andy Hunt, Illinois Farmer  
  Monte Weller, Agronomist  
  Kyle Pierce, Illinois Farmer  
  Tony Smith, Georgia Farmer  
  Dennis Lindsay, Iowa Farmer
7:00am-5:30pm  Conference Registration
8:00am-9:00pm  Exhibits Open
7:30-9:30am  Bus Tour to Illini FS Facility (see page 2 for repeated times)
7:30-9:30am  Concurrent Sessions

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### Precision A to Z

**Foellinger Great Hall**
- Yield Monitors
  - Tom Krill, Ohio State University
- Precision Information: How Can It Pay?
  - Barry Denton, Top-Soil Testing Service, Inc.
- Yield Monitoring on Nightmare Street
  - John Sawyer, Growmark

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### Session 5

**Tryon Festival Theatre — Repeated at 10:00am**
- Agribusiness Meets the Internet - Winners and Losers
  - Frank Beurskens, Frank Beurskens Consulting, Inc.
- Farm Applications of the Internet
  - Kent Krukewitt, Illinois Farmer
- PowerAg Network
  - Jerry Quinn, RAPID, Inc.
- Consulting with the Internet
  - Kirk A. Wesley, Consultant

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### Session 6

**Colwell Playhouse Theatre — Repeated at 10:00am**
- Status of Precision Farming in the Eastern Midwest
  - Harold F. Reetz, PPI
- Opportunities and Challenges for Precision Farming in the Western Corn Belt
  - Paul E. Fixen, PPI
- Assessing Site-Specific Economics
  - Bill Horan, Iowa Farmer
- Sorting Out the Technology
  - Ken Dalenberg, Illinois Farmer

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### Session 7

**2-418 Opera Rehearsal Room — Repeated at 10:00am**
- An Overview of Remote Sensing in Agriculture
  - Chris Johannsen, LARS, Purdue University
- Satellite Remote Sensing for Agricultural Information
  - Bryan Bailey, USFS/EROS Data Center
- Servicing Agriculture with Remote Sensing
  - Greg Knoblauch, Resource 21
- Remote Sensing: The Importance of Agronomics
  - Neal Christensen and Mike Schlemer, Farmland Industries
  - Devon Liston, University of Nebraska

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### Session 8

**2-127 Drama Rehearsal Room — Repeated at 10:00am**
- Spatial Variability in Corn Rootworm Populations and the Soil Environment: Potential Management Applications
  - Mike Ellsbury and Dave Woodson, South Dakota State University/USDA-NGIRL
- Site-Specific IPM
  - Craig Kvien, University of Georgia
- Site-Specific Weed Control
  - Dave Mortenson, University of Nebraska
Vendor Session 7:30-9:30am  Levis Center — 3rd Floor
- Use of Satellite Imagery to Detect Management Zones
  Rodney Faleide, Agri ImaGIS
  Speaker from RDI Technologies
  John Fuller, J & H Bunn Ltd.

9:30-10:00am  Break

10:00am-12:00noon  Bus Tour to Illini FS Facility

10:00am-12:00noon  Concurrent Sessions

Precision A to Z

Foellinger Great Hall
- Information Management and Use
  Dick Stitzl, Clayton Point Fertilizer
- Software Needed and Hardware Minimums
  Grant Mangold, @g/INNOVATOR Online

Repeat Session 5 & 7

See Wednesday, July 31, 7:30-9:30am for Repeat Sessions 5 and 7.
NOTE: Room assignments for Sessions 6 and 8 are switched from previous presentation.

2-127 Drama Rehearsal Room — Repeat from 7:30am
- Status of Precision Farming in the Eastern Midwest
  Harold F. Reetz, PPI
- Opportunities and Challenges for Precision Farming in the Western Corn Belt
  Paul E. Fixen, PPI
- Assessing Site-Specific Economics
  Bill Horan, Iowa Farmer
- Sorting Out the Technology
  Ken Dalenberg, Illinois Farmer

Session 8

Colwell Playhouse Theatre — Repeat from 7:30am
- Spatial Variability in Corn Rootworm Populations and the Soil Environment: Potential Management Applications
  Mike Ellsby and Dave Woodson, South Dakota State University/USDA-NGIRL
- Site-Specific IPM
  Craig Kvien, University of Georgia
- Site-Specific Weed Control
  Dave Mortenson, University of Nebraska

Levis Center - 2nd Floor
- Farm Chemicals Magazine
  Precision Progress — Dave Downey, Purdue University
  Building a Breakeven Precision Business — Cheryl Kohls, Cenex/Land O'Lakes
  Getting Paid in the Precision Business — Perry Petersen, Terra Industries

Vendor Session

Levis Center - 3rd Floor
- John Deere Precision Farming

Vendor Session

Levis Center - 4th Floor
- Zycom Corporation
12:00noon-3:30pm  Lunch and Exhibits — Lunch sponsored by: John Deere Precision Farming

1:00-3:00pm  Bus Tour to Illini FS Facility

3:30-5:30pm  Concurrent Sessions

**Precision A to Z**

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**Foellinger Great Hall**

- On-Farm Research with Precision Tools  
  *Fran Pierce, Michigan State University*
- Making It Pay  
  *Chad Hertz, Hertz Farm Management*

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**Session 9**

**Tryon Festival Theatre — Repeated Thursday, 7:30am**

- On-Farm Research with Precision Tools  
  *Don Bullock, University of Illinois*
- Evaluating Population and Hybrids with Precision Tools  
  *Todd Peterson, Pioneer Hi-Bred International, Inc.*
- The Value of Farmer-University-Industry Partnerships in Precision Agriculture  
  *Don Bot, Minnesota Farmer*
- Mineralogy/Redox Effects on Yield Maps  
  *Charles Roth, Purdue University*

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**Session 10**

**Colwell Playhouse Theatre — Repeated Thursday, 7:30am**

- GIS Resources from NRCS  
  *Tom D’Avello, NRCS*
- GIS Applications in Agriculture  
  *Kris Lynn, Rain and Hail Insurance*
- Lessons from Seven Years of Consecutive Yield Maps  
  *Tom Colvin, National Soil Tilth Lab, USDA-ARS*
- Support Needs for Precision Agriculture  
  *Dave Daugherty, Equipment Dealer*

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**Session 11**

**2:418 Opera Rehearsal Room — Repeated Thursday, 7:30am**

- Satellite Remote Sensing  
  *Jeff Liedtke, Space Imaging Technology*
- Satellite Remote Sensing Applications  
  *Rodney Faleide, AgriImaGIS*
- Remote Sensing in the United Kingdom  
  *John Fuller, J & H Bunn Ltd.*
- Information Management and Control  
  *Gary Wagner, North Dakota Farmer*

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**Session 12**

**2:127 Drama Rehearsal Room — Repeated Thursday, 7:30am**

- Challenges and Opportunities with Precision Management for Cotton, Peanuts and Forage Crops  
  *Cliff S. Snyder, PPI*
  *Noble Usherwood, PPI*
- NESPAL and Partnering the Implementation of Precision Agriculture in the Southeast  
  *Craig Kvien, University of Georgia*
- Yield Monitor Use for Rice and Soybeans  
  *Bill Baker, University of Arkansas*
- Implementing Precision Agriculture  
  *Will Harris, Gold Kist, Inc.*
**Cyber Dealership Workshop**

Levis Center - 2nd Floor
- Farm Chemicals Magazine
  Precision Progress — Dave Downey, Purdue University
  Building a Breakeven Precision Business — Cheryl Kohls, Cenex/Land O'Lakes
  Getting Paid in the Precision Business — Fred Fisher, Coiningwood Grain, Inc.

**Vendor Session**

Levis Center - 3rd Floor
- Case Corporation

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**Thursday, August 1**

7:00am-12:00noon  Conference Registration

8:00am-3:00pm  Exhibits Open

7:30-9:30am  Bus Tour to Illini FS Facility

7:30-9:30am  Concurrent Sessions

**Precision A to Z**

Foellinger Great Hall
- Developing a Package
  Perry Petersen, Terra Industries
- Marketing a Precision Program
  Steve Sonka, University of Illinois
  Chris Schroeder, AEC

**Repeat Session**

See Wednesday, July 31, 3:30-5:30pm for Repeat Sessions 9, 10, 11 and 12. Locations and speakers are the same as listed on previous page.

9:30-10:00am  Break and Exhibits

10:00am-12:00noon  Bus Tour to Illini FS Facility
Concurrent Sessions

**Session 13**

* Foellinger Great Hall — Repeated at 1:00pm
  * Economic Assessment of Precision Farming/Site-Specific Management Systems: Current Research Results, Issues and Future Directions
    Rob Hornbaker, University of Illinois
  * Increasing Profitability and Managing Risk with Precision Agriculture Systems?
    Jess Lowenberg-DeBoer, Purdue University
  * Use of Precision Ag to Improve the Success of My Business and That of My Customers
    Waddy Garrett, Alliance Agronomics, Inc.
  * Impact of Precision Ag on Rural Communities
    Peter Nowak, University of Wisconsin

**Session 14**

* Tryon Festival Theatre — Repeated at 1:00pm
  * Precision Farming Clubs
    Ron Olson, Top-Soil Testing Service Co.
  * Finding a Peer Group Out on the Bleeding Edge
    Robert Narem, Soil Consultants, Inc.
  * The Use of Producer Groups or "Clubs" to Aid in the Adoption of New Technologies
    Larry Lotz, Ohio State University
  * Precision Farming Clubs
    Pat Hennefen, Illinois Farmer

**Session 15**

* Colwell Playhouse Theatre — Repeated at 1:00pm
  * Challenges and Opportunities for Precision Farming in the Canadian Prairies
    Terry L. Roberts, PPI
  * Site-Specific Farming: A Concept, Not a Purchase
    Janice Mattson, Montana Farmer
  * Factors Affecting Variable Response to Fertilizer in Small Grains
    Tom Goddard, Alberta Agriculture
  * Root Simulators for Soil Fertility Mapping
    Jeff Schoena, University of Saskatchewan

**Session 16**

* 2-418 Opera Rehearsal Room — Repeated at 1:00pm
  * An Introduction to Precision Farming in the Western U.S.
    Al Ludwick, PPI
  * Precision via Center Pivot Irrigation
    Mitch Schefelk, J. R. Simplot Company
  * Precision for Irrigated Agriculture in the Midwest
    Jim Scheper, USDA-ARS
  * Precision Irrigation and Fertigation in the Northwest
    Jeff Stark, University of Idaho

**Cyber Dealership Workshop**

* Levis Center - 2nd Floor
  * Farm Chemicals Magazine
    Precision Progress — Dave Downey, Purdue University
    Building a Breakeven Precision Business — Cheryl Kohls, Cenex/Land O'Lakes
    Getting Paid in the Precision Business — Perry Petersen, Terra Industries
12:00noon-1:00pm  Lunch — Sponsored by: PPI and FAR

1:00-3:00pm  Concurrent Sessions

See Thursday, August 1, 1996, 10:00-12:00am for Repeat Sessions 13, 14, 15 and 16. Locations and speakers are the same as listed on previous page.

3:00-3:30pm  Break

3:30-4:45pm  Closing General Session

• PPI - FAR and Information Technology
  Bob Darst, PPI and FAR

• Economic, Social and Environmental Dimensions of Precision Agriculture
  Luther Tweeten, Ohio State University

• What is the “Take-Home” Message from this Conference?
  Panel Discussion
  Doug Harford, Illinois Farmer
  Gary Wagner, Minnesota Farmer
  Tim Taylor, New York Farmer

• Closing Comments
  Paul Fixen, PPI
Organizers:
- Potash & Phosphate Institute (PPI)
- Foundation for Agronomic Research (FAR)
  and
- CCNet Agribusiness Task Force, Champaign-Urbana Chamber of Commerce
- Clear Window MultiMedia
- National Center for Supercomputing Applications (NCSA)
- University of Illinois, College of Agricultural, Consumer and Environmental Sciences

Sponsors:
- Ag-Chem Equipment Co., Inc.
- @g/INNOVATOR Online
- Agricultural Retailers Association (ARA)
- AGRIS Corporation—Lunch sponsor, Tuesday, July 30
- Canadian Fertilizer Institute (CFI)
- Case Corporation
- Farm Plan
- Gateway 2000
- IllinoisAgriNews
- John Deere Precision Farming—Lunch sponsor, Wednesday, July 31
- Meister Publishing Company
- Natural Resources Conservation Service (USDA-NRCS)
- The Fertilizer Institute (TFI)

Supporters:
- Conservation Technology Information Center (CTIC)
- Council for Agricultural Science and Technology (CAST)